

Application No. 10/068,103
Amendment "C" dated September 2, 2003
Reply to Office Action mailed April 17, 2003

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- Sub 1
1. (Currently Amended) A dental device configured for curing light-curable compounds, comprising:
 - a body extending between a proximal end and a distal end, wherein the proximal end of the body is ~~sized and configured to be received by~~ tapered to facilitate insertion of the dental device into a holding slot of a dental hand piece holding tray that is sized and configured to receive at least one type of dental hand piece; and
 - a light source disposed at the distal end of the body and configured to emit radiant energy suitable for curing a light-curable compound.
 - C 2. (Original) A dental device as recited in claim 1, wherein the light source comprises at least one LED.
 3. (Original) A dental device as recited in claim 1, further including a power cord operably connecting the dental device to a power supply.
 4. (Original) A dental device as recited in claim 3, further including power supply wires disposed within the body and communicating between the light source and the power cord.
 5. (Original) A dental device as recited in claim 1, further comprising controls disposed on the body, wherein the controls are configured for controlling illumination of the light source.

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6. (Original) A dental device as recited in claim 5, wherein the controls include a first button for activating the light source for a predetermined duration of time.

7. (Original) A dental device as recited in claim 6, wherein the controls further include at least one button for altering the predetermined duration of time.

8. (previously presented) A dental device as recited in claim 1, further including at least one battery disposed at least partially within the body for supplying power to the light source.

9. (Original) A dental device as recited in claim 1, further comprising a transilluminating lens disposed at the distal end of the dental device adjacent to the light source.

10. (Original) A dental device as recited in claim 9, wherein the transilluminating lens is configured to filter out undesired wavelengths emitted by the light source.

11. (Original) A dental device as recited in claim 9, wherein the transilluminating lens is fixedly connected to the dental device.

12. (previously presented) A dental device as recited in claim 1, wherein dental device further comprises a heat sink configured so as to draw away and dissipate heat generated by the light source.

13. (Original) A dental device as recited in claim 12, wherein the light source is mounted on the heat sink.

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14. (Original) A dental device as recited in claim 12, wherein the heat sink comprises at least one of aluminum, brass, copper, steel or silver.

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15. (Currently Amended) A dental device configured for curing light-curable compounds comprising:

a body extending between a proximal end and a distal end, wherein the proximal end of the body is configured to securely fit into a holding slot of a standard dental hand piece holding tray that is sized and configured to securely receive at least one type of dental hand piece, and wherein the distal end of the body is configured in size and shape to be inserted into the mouth of a patient; and

a light source disposed at the distal end of the body and configured to emit light suitable for curing light-curable compounds, wherein the light source and distal end of the body are configured in size and shape to be inserted and rotated within the mouth of a patient; and

a power cord operably connecting the dental device with a remotely located power supply; and

~~controls disposed on the body configured to control the operation of the light source, wherein the controls are ergonomically disposed on the body to be manipulated by a thumb during use.~~

16. (previously presented) A dental device as recited in claim 15, wherein the light source comprises at least one LED.

17. (previously presented) A dental device as recited in claim 15, wherein at least a portion of the body is substantially cylindrical.

18. (previously presented) A dental device as recited in claim 15, further comprising a lens connected to the distal end of the dental device.

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19. (Currently Amended) A dental kit comprising:

a dental curing device configured for curing light-curable compounds and that comprises:

a body extending between a proximal end and a distal end, wherein the proximal end of the body is tapered to facilitate insertion of the dental device into a slot of a holder; and

a light source disposed at the distal end of the body and configured to emit light suitable for curing light-curable compounds; and

a holder that comprises:

an inner surface that defines the slot of the holder and that is configured in size and shape to frictionally engage at least a portion of the tapered proximal end of the dental device body; and

connecting means for connecting the holder with another device.

20. (Original) A dental kit as recited in claim 19, wherein the connecting means is configured for connecting the holder with a standard dental hand piece holding tray.

21. (previously presented) A dental kit as recited in claim 19, wherein the proximal end of the body is substantially cylindrical, and wherein the holder defines a slot through which the power cord can freely pass.

22. (previously presented) A dental device as recited in claim 1, wherein the proximal end of the body has a size and shape that is substantially identical to the size and shape of a corresponding end of at least one dental hand piece selected from the group consisting of low speed dental turbines, high speed dental turbines, ultrasonic dental devices, 3- way dental syringes, and oral suctioning devices.

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23. (previously presented) A dental device as recited in claim 1, wherein the body has a size and shape that approximates the size and shape of a standard dental hand piece.

24. (previously presented) A dental device as recited in claim 23, wherein the body has a size and shape that approximates the size and shape of at least one of a low speed dental turbine, a high speed dental turbine, an ultrasonic dental device, a 3- way dental syringe, or an oral suctioning device.

25. (previously presented) A dental device as recited in claim 15, wherein the proximal end of the body has a size and shape that is substantially identical to the size and shape of a corresponding end of at least one dental hand piece selected from the group consisting of low speed dental turbines, high speed dental turbines, ultrasonic dental devices, 3- way dental syringes, and oral suctioning devices.

26. (previously presented) A dental device as recited in claim 15, wherein the body has a size and shape that approximates the size and shape of a standard dental hand piece.

27. (previously presented) A dental device as recited in claim 26, wherein the body has a size and shape that approximates the size and shape of at least one of a low speed dental turbine, a high speed dental turbine, an ultrasonic dental device, a 3- way dental syringe, or an oral suctioning device.

28. (previously presented) A dental device as recited in claim 15, the dental device further comprising a heat sink onto which at least a portion of the light source is mounted, the heat sink being configured so as to draw away and dissipate heat generated by the light source and comprising at least one metal.

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C. 29. (previously presented) A dental kit as recited in claim 19, wherein the inner surface of the holder is tapered.

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30. (Currently Amended) A system for providing a plurality of dental treatments, comprising:

a dental hand piece holding tray;

at least two recesses associated with the dental hand piece holding tray, each recess being sized and configured to receive therein at least one type of dental hand piece;

a first dental hand piece comprising a dental curing device configured to cure light-curable compounds, the dental curing device comprising:

a body extending between a proximal end and a distal end, the proximal end being tapered to facilitate insertion of the first dental hand piece into ~~sized and configured to be received within~~ at least one of the recesses associated with the dental hand piece holding tray; and

a light source disposed at the distal end of the body and configured to emit radiant energy suitable for curing a light-curable compound; and

at least one additional dental hand piece configured to be received within at least one of the recesses associated with the dental hand piece holding tray, wherein the at least one additional dental hand piece is selected from the group consisting of low speed dental turbines, high speed dental turbines, ultrasonic dental devices, 3- way dental syringes, and oral suctioning devices.

31. (previously presented) A system as defined in claim 30, wherein the recesses associated with the dental hand piece holding tray comprise holders that are removably attached to the dental hand piece holding tray.

32-39. (canceled)